

AIR EMISSION SOURCE CONSTRUCTION PERMIT

<u>Source ID No.:</u>	0550023
<u>Effective Date:</u>	DRAFT
<u>Source Name:</u>	Holcomb Station
<u>NAICS:</u>	221112, Fossil fuel power generation (SIC 4911)
<u>Site Location:</u>	Holcomb, Kansas
<u>Site Owner/Operator Name:</u>	Owners (as described below): Holcomb 2, LLC (f/k/a/ Sand Sage Power, LLC) Holcomb 3, LLC Holcomb 4, LLC Operator: Sunflower Electric Power Corporation (Sunflower)
<u>Site Owners/Operators</u>	Owners and Operator
<u>Mailing Address:</u>	301 West 13th Street Hays, KS 67601
<u>Contact Person:</u>	Mr. Wayne Penrod Senior Manager, Environment/Production Planning Telephone Number (785)-623-3313

This permit is issued pursuant to K.S.A. 65-3008 as amended.

Description of Activity Subject to Air Pollution Control Regulations

The operator, on behalf of the owners is proposing to install and operate three new 700 (nominal¹) megawatt (700 MW) coal-fired generating units (Holcomb 2, Holcomb 3, and Holcomb 4) including three steam generators (H2, H3, and H4), three companion cooling towers, three auxiliary boilers, three emergency power generators and associated coal, lime and ash handling equipment, at the site adjacent to the existing Holcomb 1 generating unit owned by Sunflower Electric Power Corporation (Sunflower).

¹ Approximate size of the generating unit, not a reference to gross or net capacity.

Ownership of the individual Holcomb generating units is not specified. One or more of the units may be owned by a single party, while one may be jointly-owned by more than one party. These owners will own and Sunflower will operate the units and the auxiliary and the ancillary facilities which support the generating units to be constructed under this permit.

Holcomb 2 will utilize most of the material handling equipment that was installed with Holcomb 1. A new coal rail unloading system, and a new coal conveyor and crusher system will be installed which will serve both Holcomb 3 and Holcomb 4. Some cross connection of the coal handling systems is anticipated. A new waste powder (flyash and scrubber reactants) storage system will be installed for both Holcomb 3 and 4. All new auxiliary equipment will be designed and installed in accordance with appropriate New Source Performance Standard (NSPS) regulations. New material handling equipment associated with this permit will likewise be designed and installed in accordance with NSPS standards.

The proposed addition will be subject to the requirements of 40 CFR 52.21, Prevention of Significant Deterioration (PSD) as adopted under K.A.R. 28-19-350. The project consists of new units at an existing source for which at least one regulated pollutant is emitted in excess of the PSD significant emission levels. The coal-fired steam generators will be individually subject to the requirements of 40 CFR Part 60, Subpart Da, Standards of Performance for Electric Utility Steam Generating Units for which Construction Commenced after September 18, 1978; to such revisions promulgated on May 18, 2005 and amended June 9, 2006 for mercury when construction commences after January 30, 2004; and to such final revisions for PM, SO₂, and NO_x where construction commences after February 27, 2006. The coal handling system additions will be subject to the requirements of 40 CFR Part 60, Subpart Y, Standards of Performance for Coal Preparation Plants. The auxiliary boilers will be subject to the requirements of 40 CFR Part 60, Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units. H2, H3, and H4 generating units are affected sources subject to Title IV of the Federal Clean Air Act. The monitoring system, as required by Title IV and other applicable regulations, may be used to satisfy some of the monitoring requirements of 40 CFR Part 60, Subpart Da as specified therein.

Emissions of oxides of nitrogen (NO_x), carbon monoxide (CO), sulfur dioxide (SO₂), volatile organic compounds (VOC), particulate matter (PM), particulate matter less than 10 microns in diameter (PM₁₀), sulfuric acid mist (H₂SO₄), and lead were evaluated for this permit review. This project is subject to the provisions of K.A.R. 28-19-300 (Construction permits and approvals; applicability) because each steam generator individually has the potential-to-emit NO_x, CO, SO₂, VOC, PM, PM₁₀, H₂SO₄ and lead in excess of 40, 100, 40, 40, 25 and 15, 7, and 0.6 tons per year, respectively. The total emission of fluorides from the three steam generators are estimated to be below the annual significance threshold.

Mercury is not regulated under 40 CFR Part 52, and therefore was not included in the PSD review. Emission of mercury is limited at 40 CFR Part 60 Subpart Da and by state

only conditions in this permit. Emission limits will be met by blending various coals, or by the injection of powdered activated carbon (PAC), other sorbent or both. PAC or sorbent injection equipment will be installed with each steam generator.

An air dispersion modeling impact analysis, an additional impact analysis, and a Best Available Control Technology (BACT) determination were conducted as a part of the construction permit application process.

Significant Applicable Air Pollution Control Regulations

The main steam generators (H2, H3, and H4), the auxiliary boilers, the coal handling equipment, and the lime storage/handling systems, as proposed, are subject to Kansas Administrative Regulations relating to air pollution control. The following significant air quality regulations were determined to be applicable to this source:

K.A.R. 28-19-11 Exceptions Due to Breakdown or Scheduled Maintenance – as applied to State regulations K.A.R. 28-19-30 through K.A.R. 28-19-32 and K.A.R. 28-19-650.

K.A.R. 28-19-31 Emissions Limitations

K.A.R. 28-19-650 Opacity Requirements

K.A.R. 28-19-275 Special Provisions; Acid Rain Deposition

K.A.R. 28-19-300 Construction permits and approvals; applicability

K.A.R. 28-19-720 New Source Performance Standards, which adopts 40 CFR Part 60 Subpart Y

40 CFR Part 60 Subpart Da-“Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978” as amended February 27, 2006

40 CFR Part 60 Subpart HHHH – “Emission Guidelines and Compliance Times for Coal-Fired Electric Steam Generating Units” as promulgated May 18, 2005

40 CFR 60 Part Subpart IIII – “Standards of Performance for Stationary Compression Ignition Internal Combustion Engines” as proposed July 11, 2005

40 CFR Part 75 - such portions as are applicable to the Clean Air Mercury Rule

40 CFR Part 60 Subpart Db – “Standards of Performance for Industrial-Commercial-Institutional Steam Generating Unit” as amended February 27, 2006.

Air Emission Unit Technical Specifications

The following equipment or equivalent is approved:

1. Each coal-fired steam generator is to be equipped with low-NO_x burners, a separated over-fire air system (SOFA) and a selective catalytic reduction (SCR) process to control NO_x emissions, dry flue gas desulfurization (dry FGD) modules to control SO₂, and H₂SO₄ emissions, and a dry fabric-filter system to control particulate emissions and lead. Activated carbon or sorbent injection, other technology or fuel blending that achieves similar reduction effectiveness will be deployed to control mercury emissions. Maximum design fuel input for each unit to be 6,501 million BTUs per hour (mmBtu/hr) on an average annual basis. Maximum fuel sulfur content will be 0.50 percent on an average annual basis. Fuel to be Powder River Basin (PRB) sub-bituminous coal or other western coal.
2. Additions and improvements to the existing coal unloading, storage, handling and feed system, if any, to be designed to meet the requirements of 40 CFR 60 Subpart Y. All coal conveyors, except the unloading conveyors, will be enclosed to minimize the release of PM emissions. PM emissions from all drop points, including the primary coal crusher, will be captured and controlled by baghouse dust collectors. Wetting agents will be used on the coal pile and other locations, as necessary, to limit the release of fugitive emissions.
3. Additions and improvements to the existing ash transport, loading, storage, and handling systems, if any, to be designed to meet the requirements of K.A.R. 28-19-650.
4. Additions and improvements to the lime unloading, storage, transfer, and preparation systems, if any, to be designed to meet the requirements of K.A.R 28-19-650.
5. Auxiliary boiler(s) to be equipped with low-NO_x burners and flue gas recirculation (FGR). Maximum design heat input for each auxiliary boiler to be 200 mmBtu/hr. Fuel shall be pipeline quality natural gas.
6. One cooling tower sufficient to service each of the H2, H3, and H4 units to be designed with efficient commercially available drift eliminators to reduce aerosol and particulate emissions from the tower.
7. One 1500 kW emergency generator (approximately 1790 horsepower) for each of the H2, H3, and H4 units to be equipped with a catalytic converter designed to meet the requirements of proposed 40 CFR Part 60 Subpart IIII.

Air Emissions Estimates from the Proposed Holcomb Expansion Project

Pollutant Type	Post Permit Potential-To-Emit (Tons per Year) ²
Nitrogen Oxides (NO _x)	6022
Carbon Monoxide (CO)	12842
Sulfur Dioxide (SO ₂)	8543
Volatile Organic Compounds (VOC)	301.3
Particulate Matter (PM/PM ₁₀)	3397
Elemental Lead	1.40
H ₂ SO ₄	360
Mercury (Hg)	0.842

Air Emission Limitations

1. K.A.R. 28-19-650(a)(3): Opacity of visible emissions from each emissions unit after control, if any, shall not exceed 20 percent on a 6-minute average basis.
2. H2, H3, and H4 Main Steam generators:

On and after the required performance tests referenced in 40 CFR Part 60 and K.A.R. 28-19-212, the emissions of each pollutant that is expressed as lbs/mmBtu or as lbs/MWh shall not exceed the limit referenced hereunder. Test requirements and compliance with this standard is described in the section entitled Compliance and other Performance Testing.

“Day” in the 30-day rolling average limits for NO_x and SO₂ shall have the same meaning as “boiler operating days” as defined in 40 CFR 60.41Da for units constructed after February 28, 2005.

The operator of these units shall use good air pollution control practices to minimize emissions during initial startup and shakedown operations³ of the steam generators. Shakedown operations will be completed prior to the required NSPS performance testing.

² Potential-to-emit estimates are based on operation at full capacity for 8760 hours per year while in compliance with all conditions of this permit.

³These operations may include, but are not limited to, first fires, proof of interlocks, steam blow, chemical cleaning, initial turbine roll and shakedown operations and testing of the steam generator and turbine equipment.

Subsequent startup practices shall include the use of natural gas as an ignition fuel, low sulfur solid fuels, and the placing in service, and removing from service, of control technology equipment in accordance with manufacturers' recommendations consistent with long-term sustainable operation of the steam generator and for the individual air pollution control equipment installed.

Equipment is to be placed in service as specified in the appropriate paragraphs below.

- a. The operator of these units shall not emit or cause to be emitted from any unit NO_x emissions exceeding 0.07 pounds per million BTU heat input (lb/mmBtu) on a 30-day rolling average basis, excluding periods of startup, shutdown, and malfunction. This emission limit is less than the NSPS emission limit of 1.0 lb/MWh in 40 CFR 60.44Da(e).

During the first 18 months following initial startup, the first unit (or multiple units that initiate operation contemporaneously) constructed under this permit shall not emit or cause to be emitted any NO_x emissions exceeding 0.10 lb/mmBtu on a 30-day rolling average basis, excluding periods of startup, shutdown, and malfunction, in lieu of the 0.07 lb/mmBtu limit in item (2a). During this period, the owner or operator must operate and maintain the SCR system and demonstrate "best practices" to achieve 0.07 lb/mmBtu. Best practice includes but is not limited to: evaluation of control equipment capabilities and characteristics to assure proper and effective operation, effective evaluation of catalyst efficiency, evaluation of CEM data to assure optimal process and control equipment operation for practical reduction of NO_x emissions, and data obtained from evaluations conducted at similar facilities.

During the first 12 months following initial startup, subsequent unit(s) constructed under this permit shall not emit or cause to be emitted any NO_x emissions exceeding 0.10 lb/mmBtu on a 30-day rolling average basis, excluding periods of startup, shutdown, and malfunction. The operator shall demonstrate best practices to achieve the 0.07 lb/mmBtu as are identified for the first unit.

NO_x emissions during startup and shutdown will be controlled by the use of low-NO_x burners, separated over-fire air systems, and a selective catalytic reactor. Startup is defined as the time period after coal fires are established and before the SCR inlet temperature is consistently above 650°F. If a prolonged startup is experienced (SCR is not placed in service when the proper temperature is reached), the operator will notify KDHE of the conditions contributing to such prolonged startup in accordance with the malfunction notification provisions. If the equipment vendor specifies a design temperature greater than 650°F, then the temperature shall be subject to revision in coordination with KDHE..

- b. The operator of these units shall not emit or cause to be emitted from any unit SO₂ emissions exceeding 0.095 lb/mmBtu on a 30-day rolling average basis. Such limitation shall not apply during periods of startup and shutdown, or when emergency conditions defined in 40 CFR 60.41Da exist and the procedures under 40 CFR 60.48Da(d) are implemented.

The operator of these units shall not emit or cause to be emitted from any unit SO₂ emissions exceeding 1.4 lb/MWh on 30 successive boiler operating days (as defined in 40 CFR 60.41Da).

SO₂ emissions shall be controlled by the use of the sulfur dioxide scrubber. Startup is defined as the time period after coal fires are established and before the fabric filter inlet temperature is above 185°F. In no case will scrubber operations commence before the fabric filter is placed in service.

- c. Emissions of PM⁵ for these units shall not exceed 0.012 lb/mmBtu from any unit, averaged over three (3) runs of at least 120 minutes in duration, excluding periods of startup, shutdown, and malfunction. This emission limit is less than the NSPS emission limit of 0.015 lb/mmBtu in 40 CFR 60.42Da(c).

PM emissions shall be controlled by the use of a fabric filter.

- d. Emissions of PM₁₀⁶ shall not exceed 0.035 lb/mmBtu from any unit, averaged over six (6) runs of at least 120 minutes in duration, excluding periods of startup, shutdown, and malfunction. If the initial performance test demonstrates that an emissions limitation of 0.018 lb/mmBtu is consistently achievable, this limitation shall supersede the PM₁₀ emission limitation of 0.035 lb/mmBtu.
- e. If the initial performance test for each unit does not indicate that a PM₁₀ emission limitation of 0.018 lb/mmBtu is consistently achievable, then either the emission limitation indicated by the initial performance test, contingent upon approval by KDHE, shall be incorporated into a revised permit, or additional testing shall be accomplished (in accordance with "Compliance and other Performance Testing" Paragraphs 7 and 8 below) to determine the revised emissions limitation. Additional testing, if done,

⁵ The term "PM" as used in this permit means that particulate matter emitted by a steam generator that can be quantified by analysis under Reference Method 5 set forth in Appendix A of 40 C.F.R. Part 60.

⁶ The term "PM₁₀" as used in this permit means that particulate matter (existing as solid, liquid, and gaseous form) emitted by a steam generator that can be quantified by analysis either under Reference Method 5 and 202 or under 201 (or 201A) and 202 or by such methods approved by both KDHE and Region VII of the U.S. EPA.

shall be accomplished in 12 months from the date of completion of the initial performance test. Thereafter a new emissions limitation shall be determined by KDHE and incorporated into a revised permit, with such new emissions limitation to be deemed effective as of the date of the initial performance test.

- f. Emissions of Volatile Organic Compounds (VOC) for any unit shall not exceed 0.0035 lb/mmBtu, averaged over the period specified in the test protocol approved by KDHE.
- g. Emissions of Carbon Monoxide (CO) for any unit shall not exceed 0.15 lb/mmBtu, averaged over the period specified in the test protocol approved by KDHE.
- h. Emissions of total elemental Lead (Pb) for any unit shall not exceed 16.4 lb/TBtu averaged over the period specified in the test protocol approved by KDHE.
- i. Emissions of total sulfuric acid mist (H₂SO₄) for any unit shall not exceed 0.004 lb/mmBtu averaged over the period specified in the test protocol approved by KDHE.
- j. Emissions of mercury for any unit shall not exceed 0.097 lb/GWh over a 12 month rolling average, excluding periods of startup, shutdown, and malfunction, when burning sub-bituminous coal. (40 CFR 60Da(a)(2)(ii))

Emissions of mercury for any unit shall not exceed 0.020 lb/GWh over a 12 month rolling average, excluding periods of startup, shutdown, and malfunction, when burning bituminous coal. (40 CFR 60Da(a)(1))

The operator shall reduce mercury emissions to 0.020 lb/GWh, as determined on a 12 month rolling average basis, when burning sub-bituminous coal, or any blend of coals and/or other supplementary fuels, excluding periods of startup, shutdown, and malfunction.

This emission limit is less than the NSPS emission limit established at 40 CFR 60.45Da(a)(2)(ii). In no case shall this NSPS limitation, or other appropriate NSPS emission rate established as of June 9, 2006, for any fuel or combination of fuels identified in 40 CFR 60.45Da(a), be exceeded.

NSPS standards referenced in 40 CFR Part 60, Subpart Da specifies limits to the emission of NO_x, SO₂, PM, and Hg from these steam generators individually. Because the limits expressed above in Conditions 2.a, 2.c, and 2.j are more restrictive than the NSPS requirements those NSPS emission limits are not included in this permit.

3. Coal System:

40 CFR Part 60, Subpart Y limits visible emissions from any new or modified coal handling equipment to 20 percent opacity.

4. Ash System:

K.A.R. 28-19-650 limits visible emissions from any new or modified ash system equipment to 20 percent opacity.

5. Lime System:

K.A.R. 28-19-650 limits visible emissions from any new or modified lime system equipment to 20 percent opacity.

6. Cooling Tower:

The cooling tower for each unit will be equipped with commercially available high efficiency drift eliminators with a maximum total liquid drift not to exceed 0.0005 percent of circulating water flow rate. Compliance with this requirement is demonstrated by maintaining records of the vendor-guaranteed maximum total liquid drift. No chromium-based water treatment chemicals will be used in the circulating water system and thus the requirements of 40 CFR Part 63, Subpart Q shall not apply.

Total dissolved solids in the circulating water for each of the three cooling towers associated with these sources shall not exceed 9,000 ppm by volume.

Permit Conditions

1. Coal handling equipment is subject to regulation under 40 CFR Part 60 Subpart Y, namely: coal processing and conveying equipment (including breakers and crushers), and coal storage systems (except for open storage piles). New coal handling equipment includes conveyors, a new crusher house, new transfer points and a new stacker/reclaimer system. The equipment, either newly constructed or modified (if any), shall be enclosed and vented to a baghouse with a 99% manufacturers' guarantee control efficiency.
2. Newly constructed or modified equipment for fly ash and lime systems, if any, shall be enclosed and vented to a baghouse with a 99% manufacturers' guaranteed control efficiency.
3. The baghouses for the newly constructed or modified equipment shall be in place and continuously operated, except during periods of malfunction, breakdown, or necessary repairs, to control emissions of PM and PM₁₀ whenever the associated material handling equipment is in operation. Maintenance and repair of the baghouses shall be conducted in a manner to minimize emissions.

4. The total fuel consumed in each auxiliary boiler shall not exceed 175,000 MCF/calendar-year. NSPS emission standard for NO_x referenced in 40 CFR Part 60, Subpart Db does not apply for boilers of less than 250 MMBtu/hr operated at an annual capacity factor of less than 10% (40 CFR 60.44b(k)) while firing natural gas. Should the owner or operator ever exceed the 10% annual capacity factor (uses more than 175,000 MCF/calendar year), the schedule for starting the initial performance test would commence as soon as the exceedance has occurred.
5. The pre-controlled emission rate of sulfur dioxide (SO₂), as measured at the scrubber inlet, for any of the H2, H3, and H4 units shall not exceed 1.23 lbs SO₂/MMBtu on an average annual basis.
6. The emergency diesel generators, shall be equipped with a standard catalytic converter and shall not be operated for more than 500 hours per year.

Compliance and Other Performance Testing

1. Within 60 days after achieving the maximum production rate for each steam generator, but not later than 180 days after initial start-up, the owner or operator shall conduct performance tests to demonstrate compliance with the applicable conditions and limitations set forth in this permit for SO₂, NO_x, CO, VOC, and PM, and furnish KDHE a written report of the results of such performance tests.
2. Within 60 days after achieving the maximum production rate for each steam generator, but not later than 180 days after initial start-up, the owner or operator shall conduct Method 9 performance test(s) to demonstrate compliance with the opacity limitations set forth for the new or modified coal, lime and ash handling equipment and furnish KDHE a written report of the results of such performance test(s).
3. Within 18 months after initial start-up of the first steam generator, the owner or operator shall conduct performance test(s) to demonstrate compliance with the applicable conditions and limitations set forth in this permit for elemental lead and H₂SO₄, and shall furnish to KDHE a written report of the results of such performance test(s).
4. Within 60 days after achieving the maximum production rate for the first steam generator, but not later than 180 days after initial start-up, the owner or operator shall demonstrate compliance with the cooling tower total dissolved solids concentration limit and furnish KDHE a written report of the results of such performance test(s). For the six (6) months thereafter, the owner or operator shall perform monthly analyses to verify the limitation is not exceeded. Once this has been verified, the analyses shall be performed semiannually.

For each subsequent generating unit, the owner or operator shall perform monthly analyses for six months after initial startup to verify the limitation is not exceeded. Once this has been verified, the analyses shall be performed semiannually.

5. Continuous monitoring systems and monitoring devices required for each steam generator shall be installed and operational prior to conducting compliance performance tests under 40 CFR 60.8. Verification of operational status, at a minimum shall include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the devices as required by 40 CFR 60.13.
6. In conducting the compliance performance tests required by this permit, the reference test methods and procedures outlined in K.A.R. 28-19-212 and 40 CFR 60.48Da shall be used to demonstrate compliance with the limitations and conditions set forth in this permit.
7. Within 180 days after commencing commercial operation of the first unit, the owner or operator shall conduct a performance test of PM₁₀ emissions and furnish KDHE a written report of the results of such test within 60 days of completion of said test. If, after evaluating the test data, the report reasonably concludes that the emissions limitation of 0.018 lb/mmBtu for PM₁₀ in Condition 2.e. of the Air Emissions Limitations section above may not be achievable, then the owner or operator may perform additional testing to determine an emission limitation for PM₁₀ that the steam generator can and should be able to consistently comply with such limit while operating in a manner of good operating practices and regularly scheduled maintenance of the steam generator, pollution control equipment and ancillary equipment.
8. If the owner or operator requests that the PM₁₀ emissions limitation be adjusted through additional testing, it shall include within the report required by Paragraph 7, a complete plan for establishing a PM₁₀ measurement protocol, including the method(s), number of test runs, and a tentative timeline, not to exceed 12 months, necessary to establish by appropriate statistical methods the new PM₁₀ emissions limitation for the unit under the range of normal operating conditions. Such plan shall include a requirement for quarterly reporting, to include an analysis of test results, unit operating parameters, air pollution control device operating parameters, fuel conditions, and other such matters as might influence the test results.

KDHE shall take measures to adjust the PM₁₀ emissions limitation to that which is determined by the test results, as follows: KDHE shall establish a revision to the PM₁₀ emissions limitation for each steam generator which: (i) insures that there will be no exceedence of either the NAAQS or the PSD increment consumption allowance for PM₁₀, (ii) is based upon a statistical analysis, and (iii) is consistently achievable on a sustained and long term basis with the exercise of due care and good operating practices

Within 180 days after commencing commercial operation or 60 days after the first unit's emission limit has been established, whichever is later, the owner or operator shall conduct a performance test of PM₁₀ emissions for the second and

third unit and furnish KDHE a written report of the results of such test within 60 days of completion of said test.

Monitoring Requirements

1. Within 60 days after achieving the maximum production rate at which each steam generator will be operated, but not later than 180 days after initial start-up of the steam generator, the owner or operator of each unit shall install and operate a continuous monitoring system to monitor and record emissions of SO₂, NO_x, and Hg as required by 40 CFR 60.49Da and of opacity or alternatives to monitoring procedures or requirements approved by the Administrator of the U.S. EPA pursuant to 40 CFR 60.13(i).
2. The owner or operator shall use opacity monitoring equipment as an indicator of continuous particulate matter control device performance and demonstrate compliance with §60.42Da(b) and conduct the performance test annually. The owner or operator using a fabric filter to comply with the applicable emission limits shall install, calibrate, maintain, and continuously operate a bag leak detection system according to 40 CFR 60.48Da(o)(4). As an alternative to the above, the owner or operator may elect to install, certify, maintain, and operate a continuous particulate matter emission monitoring system measuring particulate matter emissions discharged from the affected facility to the atmosphere and shall record the output of the system as specified 40 CFR 40.48Da(p).
3. All continuous monitoring systems required by 40 CFR Part 60 shall meet the applicable requirements of 40 CFR 60.13, Appendix B, and Appendix F for certifying, maintaining, operating and assuring quality of the systems, and, where applicable, with the requirements of 40 CFR Part 75.

Recordkeeping

1. The operator shall maintain records of the occurrence and duration of any start-up, shut-down, or malfunction in the operation of each unit subject to 40 CFR 60 any malfunction of any air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. These requirements are described in 40 CFR 60.7(b).
2. The operator shall maintain records of the occurrence and duration of any emergency condition in the operation of H2, H3, and H4 scrubber. These requirements are described in 40 CFR 60.7(b).
3. The operator of H2, H3, and H4 shall maintain records of the occurrence and duration of any periods during which a continuous monitoring system or monitoring device is inoperative. These requirements are described in 40 CFR Part 75.

4. The operator shall maintain records of the reports, notifications, and performance tests required by this permit.

All of the above records shall be maintained on site for a period of 5 years.

Reporting

Reports demonstrating compliance shall be submitted to the KDHE in the same engineering units as stated in the applicable requirements.

1. Items that are required to be reported quarterly (opacity excess emission reports per 40 CFR 60.51Da(i)) shall be submitted to KDHE and postmarked by the 30th day following the end of each calendar quarter.
2. Items that are required to be reported semiannually (NO_x and SO₂ per 40 CFR 60.51Da(b) and Hg per 40 CFR 60.51Da(g)) shall be submitted to KDHE and postmarked by the 30th day following the end of each calendar half or, upon agreement by KDHE and proper certification, submitted electronically per 40 CFR 60.51Da(k) by the 30th day following the end of each calendar quarter.
3. Items that are required to be reported annually (natural gas consumption of the auxiliary boiler and average annual scrubber inlet SO₂ concentration) shall be submitted to KDHE and postmarked by the 30th day following the end of each calendar year.
4. Within 60 days after completion of the PM₁₀ performance test, the owner or operator of the first unit shall furnish KDHE a written report of the results of such test. If the owner or operator requests emission limitation adjustment for PM₁₀ in accordance with this permit, the owner or operator shall continue to furnish quarterly reports on progress towards developing data sufficient to establish such new limitation until the conclusion of the process defined in this permit.
5. Within 90 days after the 18 months NO_x trial period of the first unit (12 months for subsequent units), if the data demonstrates that the 0.07 lb/mmBtu limit cannot be met, then the owner or operator of said unit shall submit a performance assessment report and, as part of this report, the minimum NO_x emission rate, in lb/mmBtu, that can be achieved during long-term load dispatch operation, and justification thereof. In that event, "best practices" shall continue to be used until an alternative emission rate is effective.
6. The excess emissions and monitoring systems performance report and/or a summary report for opacity per 40 CFR 60.51Da(h) shall, for each generating unit, be submitted to the KDHE as required by 40 CFR 60.7(c). The summary report form shall contain the information and be in the format as specified in 40 CFR 60.7(d). Written reports of excess emissions shall include the following information:

- a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, the date and time of commencement and completion of each time period of excess emissions, and the process operating time during the reporting period.
- b. Specific identification of each period of excess emissions that occurs during start-ups, shut-downs, and malfunctions, the nature and cause of any malfunction (if known), the corrective action taken or preventive measures adopted. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero span checks and the nature of the system repairs and adjustments.
- c. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

7. Malfunction

The Owner or Operator must notify KDHE by telephone, facsimile, or electronic mail transmission within two (2) working days following the discovery of any failure of air pollution control equipment, process equipment, or of the failure of any process to operate in a normal manner which results in an increase in emissions above any allowable emission limit stated in "Air Emission Limitations" in this permit. In addition, the Owner or Operator must notify KDHE in writing within ten (10) days of any such failure. The written notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial malfunction, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed in "Air Emission Limitations", and the methods utilized to mitigate emissions and restore normal operations.

Compliance with this malfunction notification shall not excuse excess emissions resulting from such event.

Notification

1. The Bureau of Air and Radiation shall be notified when installation of the equipment is complete so an evaluation may be conducted to verify compliance with applicable regulations.
2. K.A.R. 28-19-720 (40 CFR 60.7(a)) requires that written notifications of the following be submitted to KDHE:
 - a. The date construction of each affected facility under 40 CFR Part 60, associated fuel and ash handling equipment, and the associated air pollution control systems is commenced. The notification is to be postmarked no later than 30 days after such date.

- b. The actual date of initial startup of each affected facility under 40 CFR Part 60. The notification is to be postmarked within 15 days after such date.
- c. The date when the initial performance testing of each affected facility under 40 CFR Part 60 is to commence. The notification is to be postmarked no less than 30 days prior to such date.

The attached NSPS notification form will be used to submit the above required notifications.

Title IV and Acid Rain Requirements

Each generating unit is subject to certain Title IV and Acid Rain requirements. A complete Acid Rain permit application shall be submitted in accordance with the deadlines specified in 40 CFR Part 72. Notification regarding applicable monitoring equipment will be made as required.

The owner or operator will submit the applicable equipment monitoring plan, and will notify KDHE and EPA when the CEMS certification tests are to be performed.

Title V Requirements

An application for significant modification to the current Title V permit, shall be submitted within one year of the initial startup of the first generating unit.

General Provisions

- 1. Construction can continue on the units approved in this document in accordance with the provisions of 40 CFR 52.21(r)(2) and K. A. R. 28-19-301(c) for a period of 96 months from the date of issuance of the permit.
- 2. Construction shall not commence for any unit approved in this document if construction has not commenced within 18 months of the effective date of this document without written approval from KDHE. The owner or operator shall submit for KDHE approval information for re-evaluating BACT and submit an analysis demonstrating you do not significantly contribute to a violation of the NAAQS or increment.
- 3. A construction permit or approval must be issued by KDHE prior to commencing any construction or modification of equipment or processes which result in an increase in potential-to-emit equal to or greater than the thresholds specified at K.A.R. 28-19-300.
- 4. Upon presentation of credentials and other documents as may be required by law, the operator shall allow a representative of the KDHE (including authorized contractors of the KDHE) to:

- a. enter upon the operator's premises where a regulated facility or activity is located or conducted or where records must be kept under conditions of this document;
 - b. have access to and copy, at reasonable times, any records that must be kept under conditions of this document;
 - c. inspect at reasonable times, any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this document; and
 - d. sample or monitor, at reasonable times, for the purposes of assuring compliance with this document or as otherwise authorized by the Secretary of the KDHE, any substances or parameters at any location.
5. The emission units or stationary sources that are the subject of this document shall be operated in compliance with all applicable requirements of the Kansas Air Quality Act and the Federal Clean Air Act.
6. This document does not relieve the operator of the obligation to obtain other approvals, permits, licenses or documents of sanction that may be required by other federal, state or local government agencies.
7. Issuance of this document does not relieve the owner or operator of any requirement to obtain an air quality operating permit under any applicable provision of K.A.R. 28-19-500.

Permit Engineer

Rick Bolfig, P.E.
Environmental Engineer
Bureau of Air and Radiation

Date Signed

RJB:

c: NWDO
C-6706